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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,362	12/22/2003	David M. Scoville	00655P1218US	7971

32116 7590 03/23/2005

WOOD, PHILLIPS, KATZ, CLARK & MORTIMER  
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CHICAGO, IL 60661

EXAMINER

DUONG, THO V


ART UNIT

PAPER NUMBER

3743

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/743,362	<b>Applicant(s)</b> SCOVILLE ET AL. 	
	<b>Examiner</b> Tho v Duong	<b>Art Unit</b> 3743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2004.  
 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.  
     4a) Of the above claim(s) 9-16 is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1,2,4,5 and 7 is/are rejected.  
 7) ☒ Claim(s) 3,6 and 8 is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☒ The drawing(s) filed on 27 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/1/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Receipt of applicant's amendment filed 12/27/2004 is acknowledged. Claims 1-16 are pending. Claims 9-16 have been withdrawn.

#### ***Response to Arguments***

Applicant's arguments with respect to claims 1-2,4-5 and 7 have been considered but are moot in view of the new ground(s) of rejection. The examiner thanks the applicants for pointing out the inadvertently omission of claim 16, which should be included in group II, claims 9-15 and withdrawn from further consideration.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,2 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Kokubunji et al. (US 2002/0040776A1). Kokubunji discloses (figures 4,6 and paragraph 65 and 66) a multi-fluid heat exchanger comprising a first and second, elongated, spaced, parallel tubular headers (130) having opposing ends; uniformly spaced elongated tube slots in each of said headers with the tube slots in one header facing and aligned with the tube slots in the other header; a plurality of flatted tubes (111,121) extending between the headers and having ends receiving in aligned ones of the tube slots; one tube slot (135) in each header being unoccupied and being aligned with each other and located between two groups of the flatted tubes (A,B); a pair of baffles (134) in each header, one on one side of the one tube slot (135) and between the one tube slot (135)

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and the adjacent tube slot, which receives the end tube (111) of group (A) and the other baffle (134) on the opposite side of the one tube slot (135) and between the one tube slot (135) and the adjacent tube slot on the opposite side, which receives the end tube (121) of group (B); serpentine fins (112,122) extending between and in heat transfer relation with at least the adjacent tubes in each of the two groups (A,B); and an additional fin (141) in heat transfer relation with an end tube in each of the two groups (A,B).

Claims 1,2,4-5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Nishishita Kunihiro (EP 0859209 A1). Nishishita discloses (figures 31 and 34) a multi-fluid heat exchanger comprising a first and second, elongated, spaced, parallel tubular headers (2) having opposing ends; uniformly spaced elongated tube slots in each of said headers with the tube slots in one header facing and aligned with the tube slots in the other header; a plurality of flattened tubes (4a,4b) extending between the headers and having ends receiving in aligned ones of the tube slots; one weep hole (15) in each header being unoccupied and being aligned with each other and located between two groups of the flattened tubes (A,B); a pair of baffles (10) in each header, one on one side of the weep hole (15) and between the weep hole (15) and the adjacent tube slot, which receives the end tube (4a) of group (A) and the other baffle (10) on the opposite side of the weep hole (15) and between the one tube slot (15) and the adjacent tube slot on the opposite side, which receives the end tube (4b) of group (B); serpentine fins (3a) extending between and in heat transfer relation with at least the adjacent tubes in each of the two groups (A,B); and an additional serpentine fin(12) in heat transfer relation with an end tube in each of the two groups (A,B). Nishishita further discloses (figure 34) that the additional fin (12) is greater in height than fin (3a).

*Allowable Subject Matter*

Claims 3,6 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ruoff et al. (EP 0789213A2) discloses a gap between two groups of tubes with baffles enclosed the divider.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on 11/1/2004 prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609(B)(2)(i). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

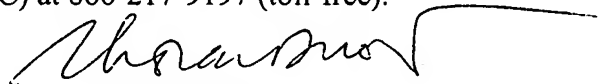
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tho v Duong whose telephone number is 571-272-4793. The examiner can normally be reached on M-F (first Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Bennet can be reached on 571-272-4791. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



TD  
March 10, 2005



Tho v Duong  
Examiner  
Art Unit 3743